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### **REMARKS**

This response is intended as a full and complete response to the non-final Office Action mailed September 10, 2004. In the Office Action, the Examiner notes that claims 1-58 and pending and rejected. By this amendment, claims 1, 6-7, 9-10, 12, 14, 26-27, 32, 35, 42, 51-54, and 57-58 are amended, and claims 8 and 46-50 are cancelled.

In view of both the amendments presented above and the following discussion, the Applicants submit that none of the claims now pending in the application are anticipated or obvious under the respective provisions of 35 U.S.C. §102 and 103. Further, the Applicant has addressed the Examiner's Double Patenting Rejections and submits that none of the claims are double patented under the statutory type of double patenting rejection, and that a terminal disclaimer will be filed for those claims being rejected for the judicially created doctrine of double patenting. Thus, the Applicants believe that all of these claims are now in allowable form.

It is to be understood that the Applicants, by amending the claims, do not acquiesce to the Examiner's characterizations of the art of record or to the Applicants' subject matter recited in the pending claims. Further, the Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant responsive amendments.

### **REJECTIONS**

#### **Double Patenting**

#### **35 U.S.C. §101**

The Examiner alleges that claim 52 of this application claims the same invention as that of claim 52 of copending application Serial No. 09/628,805. As such, the Examiner has provisionally rejected claim 52 under 35 U.S.C. §101.

The Applicant has canceled claim 52 in copending application Serial No. 09/628,805. Therefore, the rejection is now deemed moot.

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**Obviousness Double Patenting**

The Examiner has rejected claims 1, 6, 32, 42, 47, 51, and 54 provisionally under the judicially created doctrine of obviousness-type double patenting as being unpatentable over, respectively, claims 1, 7, 34, 43, 48, 51 and 54 of copending Application Serial No. 09/628,805.

In response, the Applicant will file a Terminal Disclaimer in the copending Application Serial No. 09/628,805 under 37 C.F.R. 1.130(b) upon indication of allowable subject matter. As such, the Applicant respectfully requests that the obviousness-type double patenting rejection be held in abeyance.

**35 U.S.C. §102**

**Claims 1-9, 11-21, 25-28, 30-44, 51-56 and 58**

The Examiner has rejected claims 1-9, 11-21, 25-28, 30-44, 51-56 and 58 under 35 U.S.C. §102 as being anticipated by U.S. 6,177,391 B1 to Alexander (hereinafter "Alexander"). The Applicants respectfully traverse the rejection.

**A. Claim 8**

The Applicant has canceled claim 8. Therefore, the rejection regarding this claim is now deemed moot.

**B. Claims 1-7, 9, 11-21, 25-28, 30-44, 51-56 and 58**

The Applicants' independent claim 1 (and similarly independent claims 6, 26, 32, 42, 51, and 53-54) recites:

"A method for targeting virtual advertisements to terminals, comprising:  
assigning at least one virtual advertisement spot to a video program;  
assigning one or more virtual objects to the at least one virtual advertisement spot; and  
generating a retrieval plan, wherein the retrieval plan instructs one or more of the terminals to select one of the one or more virtual objects for placement at said at least one virtual advertisement spot in said video program." (emphasis added).

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"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added)). The Alexander reference fails to disclose each and every element of the claimed invention, as arranged in the claim.

The Alexander reference discloses

In FIG. 1 of the drawing, one embodiment of the EPG with Ad Window and Advertising Messages is shown. In FIG. 1, a television screen display 10 is shown. Display 10 could be generated by a conventional television receiver with interlaced scan lines, by a VCR, by a PC monitor with progressive scan lines, or by another other type of video display device. In the upper left hand corner of the screen is a PIP window 12. Below window 12 are Panel Ad Windows 14, and 16 ("Ad Windows"). Windows 12, 14, and 16 each typically occupy about  $\frac{1}{8}$  of the total screen area. The remainder of the screen area is typically occupied (moving from top to bottom of the screen) by an action key bar 18, a navigation bar 20, a grid guide 22 ("Grid Guide"), and an information box 24 (the "detailed Information area). In the embodiment pictured in FIG. 1, the position of the windows, and other user interface features, including the action key bar, navigation bar and Grid Guide, are fixed. In another embodiment of this invention, as is described further below, the position and size of the windows and other user interface features are customizable by the viewer. (see Alexander, column 3, lines 1-20).

In one embodiment of this invention, a data base of advertising messages and virtual channel ads is stored in RAM at the viewer terminal or is accessible at a web site if the viewer terminal has an Internet connection. In either case, the advertising items in the data base are labeled with coded categories that correspond to coded category labels assigned to the telecast television programs. (Preferably, these are the same categories that are used to sort the programs in the on screen category or theme guide.) The category labels of the television programs could be stored in RAM as part of the EPG data base and retrieved from the applicable Show Information Package ("SIP") based on the information from the real time clock and the tuner setting. This information identifies a time and channel that points to the applicable SIP. After the category label of the last program the viewer was watching in the television mode is retrieved from the EPG data base, this label is matched to the corresponding label in the data base of advertising messages and virtual channel ads stored in RAM. In FIG. 1 of the drawing, the advertising items to which the labels are attached are displayed in ad windows 14 and

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16 and the virtual channel ad displayed on tile 52 as described above.  
(see Alexander, column 33, lines 44-65).

The Applicant's invention is completely different than the Alexander reference. In particular, the Applicant's invention provides a system and method for delivering targeted virtual objects to reception sites. A virtual object is a realistic, synthetic replica of an actual object. The virtual object is viewable within video programming and may be combined with original video and audio to supplement or replace portions of the original video and audio content. Virtual objects may be overlaid on video, partially or entirely obscuring the underlying video. An overlaid object may be static in nature, such as a graphical icon or the like, or alternatively may be dynamic, such as a video clip, animation, or scrolling alphanumeric characters, for example. Overlaid objects may be limited spatially to a fixed portion of the video screen, limited temporally to a given time for display, limited by a combination of both location and time, or tied to a spatially changing portion of the screen that is moving with time. Alternatively, virtual objects may be added to and embedded within the actual video. Multiple virtual objects may be embedded in the video in a multi-layer fashion. The virtual object is indistinguishable from the other video content sharing the field of view. (See Applicant's specification, page 2, lines 6-18).

The Applicant's invention assigns at least one virtual advertisement spot to a video program, assigns one or more virtual objects to the at least one virtual advertisement spot, generates a retrieval plan, and provides the retrieval plan and video program to the terminal, where the retrieval plan directs the terminal to select one or more of the virtual objects for placement in the virtual advertisement spot in the video program. By contrast, the Alexander reference merely discloses an EPG formed by graphics, as opposed to video, which includes a picture-in-picture window for displaying content, as well as advertisement panels for displaying advertisements. Neither the EPG nor the advertisement panels of the EPG are a video program as defined by the Applicant's invention. Rather the EPG and associated advertisement panels are graphics that are displayed by the terminal. Since the Alexander reference fails to teach "assigning at least one virtual advertisement spot to a video program" and

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"generating a retrieval plan, wherein the retrieval plan instructs one or more of the terminals to select one of the one or more virtual objects for placement at said at least one virtual advertisement spot in said video program", the Alexander reference fails to teach each and every element of the claimed invention, as arranged in the claim.

As such, the Applicants submit that independent claims 1, 6, 26, 32, 42, 51, 52, 53 and 54 are not anticipated and fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder. Furthermore, claims 2-5, 7, 9, 11-21, 25, 27-28, 30-31, 33-41, 43-44, 55-56 and 58 depend, either directly or indirectly, from independent claims 1, 6, 26, 32, 42, 51, 52, 53 and 54 and recite additional features thereof. As such and at least for the same reasons as discussed above, the Applicants submit that these dependent claims are also not anticipated and fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder. Therefore, the Applicants respectfully request that the Examiner's rejection be withdrawn.

### 35 U.S.C. §103

#### Claims 22-24, 29, 45, 46 and 57

The Examiner has rejected claims 22-24, 29, 45, 46 and 57 as being obvious and unpatentable under the provisions of 35 U.S.C. §103(a). In particular, the Examiner has rejected claims 22-24, 29, 45, 46 and 57 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,177,931 to Alexander. The Applicants respectfully traverse the rejection.

#### A. Claim 46

The Applicant has canceled claim 46. Therefore, the rejection regarding this claim is now deemed moot.

#### B. Claims 22-24, 29, 45 and 57

Claims 22-24, 29, 45 and 57 respectfully depend from independent claims 6, 26, 42, and 54, and recite additional features thereof. In particular, claim 22 (and similarly dependent claims 23-24, 29, 45 and 57) recites in part:

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"A method of targeting virtual objects, comprising:  
    providing a video program containing one or more virtual object locations;  
    providing virtual objects for one or more of the virtual object locations;  
    providing at least one alternate virtual object for at least one of the one or more virtual object locations; and  
    providing a retrieval plan, wherein the retrieval plan at the terminal designates which of the one or more virtual object locations displays an alternate virtual object in said video program." (emphasis added).

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. Jones v. Hardy, 110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Moreover, the invention as a whole is not restricted to the specific subject matter claimed, but also embraces its properties and the problem it solves. In re Wright, 6 USPQ 2d 1959, 1961 (Fed. Cir. 1988) (emphasis added). The Alexander reference fails to teach or suggest the Applicants' invention as a whole.

As discussed above, the Alexander reference discloses

An electronic program guide having advertisement panels formed by a graphics layer that is sent to the terminals. Further, the EPG and the Profile Program use Viewer Profile information to tailor the presentation and scheduling of advertisements to viewer and to customize the presentation of the EPG for the user. One example is customizing an overlay message to an advertisement on a local geographic basis. In one embodiment, the customized messages can be preloaded by zip code into the memories of particular viewers' EPG's. The preloaded messages can be transmitted by a head end during off hours and stored in the viewer's terminal for use when the advertisement runs, e.g., during a television program or in a video clip in the Ad Window. (see Alexander, column 32, lines 23-27 and lines 35-51).

Furthermore, the Examiner's Official Notice is limited to teaching that the use of a PC as a terminal is well-known in the art. Even if the Alexander reference and the Examiner's Official Notice could somehow be operably combined, the combination would disclose customizing an overlay message to an advertisement in an EPG and sending the customized messages from a head end to the viewer's terminal for use

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when the advertisement runs. Nowhere in the combined references is there any teaching or suggestion of "providing the video program containing one or more virtual object locations" and "generating a retrieval plan at one or more viewer's terminals, wherein the retrieval plan designates which of the one or more virtual object locations displays an alternate virtual object in said video program." Therefore, the combined references fail to teach or suggest the Applicant's invention as a whole.

As such, the Applicants submit that independent claims 6, 26, 42 and 54 and dependent claims 22-24, 29, 45, 46 and 57 which depend directly or indirectly from independent claims 6, 26, 42 and 54 are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, the Applicants respectfully request that the Examiner's rejection be withdrawn.

#### Claims 10 and 47-50

The Examiner has rejected claims 10 and 47-50 under 35 U.S.C. §103(a) as being obvious and therefore unpatentable over Alexander in view of U.S. Patent 6,493,872 to Rangan (hereinafter "Rangan"). The Applicants respectfully traverse the rejection.

##### A. Claims 47-50

The Applicant has canceled claims 47-50. Therefore, the rejection is now deemed moot.

##### B. Claim 10

Claim 10 depends from independent claim 6 and recites additional features thereof. The Applicants' dependent claim 10 recites in part:

"A method of targeting virtual objects, comprising:  
providing a video program containing one or more virtual object locations;  
providing virtual objects for one or more of the virtual object locations;  
providing at least one alternate virtual object for at least one of the one or more virtual object locations; and  
providing a retrieval plan, wherein the retrieval plan at the terminal designates which of the one or more virtual object locations displays an alternate virtual object in said video program." (emphasis added).

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As discussed above, the Alexander reference discloses

An electronic program guide having advertisement panels formed by a graphics layer that is sent to the terminals. Further, the EPG and the Profile Program use Viewer Profile information to tailor the presentation and scheduling of advertisements to viewer and to customize the presentation of the EPG for the user. One example is customizing an overlay message to an advertisement on a local geographic basis. In one embodiment, the customized messages can be preloaded by zip code into the memories of particular viewers' EPG's. The preloaded messages can be transmitted by a head end during off hours and stored in the viewer's terminal for use when the advertisement runs, e.g., during a television program or in a video clip in the Ad Window. (see Alexander, column 32, lines 23-27 and lines 35-51).

Furthermore, the Rangan reference does not bridge the substantial gap between the Alexander reference and the Applicant's invention. Specifically, the Rangan reference discloses

The overall purpose of the authorizing station is addition of innovative material to the video data stream, such as text overlay, graphic icons and logos for advertisement, some of which may be associated with identity and address data to allow a viewer at a computerized end station to access advertisements and other data which may be associated with individual entities in the video presentation. Advertisements may, for example, be associated with a tracked object. Also the text annotations could either be set to track along with an object, or appear in a fixed position anywhere on the screen, as they are typical in broadcasts today. (see Rangan, column 6, lines 6-16).

Furthermore, the Rangan reference discloses

The authoring system 51 comprises multiple dedicated authoring stations equipped with software capable of tracking images within the video stream and adding annotations including interactive icons, text, animated graphics and sounds. (see Rangan, column 13, lines 19-24).

In other words, the Rangan reference merely discloses that advertising information, such as text, icons, and animated graphics associated with a tracked object in the video may be inserted into the video at an authoring station, which is upstream from the users' terminals.



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Even if the two references could somehow be operably combined, the combination would provide a library of advertisements stored at the viewer's terminal where the EPG selects advertisements for display according to pre-established selection criteria, and an authoring station for tracking and inserting advertisements in a video stream that is upstream from the user's terminal. Nowhere in the combined references is there any teaching or suggestion of "providing a video program containing one or more virtual object locations" and "generating a retrieval plan at one or more viewer's terminals, wherein a retrieval plan at the terminal designates which of the one or more virtual object locations displays an alternate virtual object in said video program." Therefore, the combined references fail to teach or suggest the Applicant's invention as a whole.

As such, the Applicants submit that dependent claim 10, which depends directly or indirectly from independent claim 6, is not obvious and fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder. Therefore, the Applicants respectfully request that the Examiner's rejection be withdrawn.

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### CONCLUSION

Thus, the Applicant submits that none of the claims presently in the application are anticipated or obvious under the respective provisions of 35 U.S.C. §102 and §103. The Applicant further submits that Applicant has addressed the Examiner's double patenting rejections and they should be withdrawn. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Steven M. Hertzberg or Eamon J. Wall at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

### POWER OF ATTORNEY/CHANGE OF CORRESPONDENCE

For the convenience of the Examiner, a copy of a recently filed Power of Attorney/Change of Correspondence Address is attached.

Respectfully submitted,

Dated: 12/8/04

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